AMENDMENT OF SOLICIT	ATION/MODIF	ICATION OF CONTRACT		J. CONTRACT	D CODE		PAGE 1	OF P.	AGES 11
2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.			5. PROJEC	CT NO	•	licable	
0004	15-Aug-2003	W33SJG-2200-8593							
6. ISSUED BY CODE	CT-P	7. ADMINISTERED BY (If other than item 6)		COI	DE				
US ARMY ENGINEER DISTRICT SAVANNAH ATTN: SHARON GODBEE (CT-P) 100 W OGLETHORPE AVENUE SAVANNAH GA 31401		See Item 6							
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, Stat	te and Zip Code)	Х	9A. AMENDME DACW21-03-B	NT OF S -0002	OLIC	ITAT	ION I	NO.
			Х	9B. DATED (SE 29-May-2003	E ITEM 1	11)			
				10A. MOD. OF	CONTRA	CT/C	RDE	R NO).
				10B. DATED (S	SEE ITEM	I 13)			
CODE	FACILITY CODI		IT A	TIONS					
X The above numbered solicitation is amended as set forth i		APPLIES TO AMENDMENTS OF SOLICE	TTA	is extended,	is not ex	rto1			
Offer must acknowledge receipt of this amendment prior (a) By completing Items 8 and 15, and returning or (c) By separate letter or telegram which includes a refe RECEIVED AT THE PLACE DESIGNATED FOR THE REJECTION OF YOUR OFFER. If by virtue of this am provided each telegram or letter makes reference to the se	copies of the amendment erence to the solicitation and a ERECEIPT OF OFFERS PRICE endment you desire to change olicitation and this amendmen	t; (b) By acknowledging receipt of this amendment of mendment numbers. FAILURE OF YOUR ACKNO OR TO THE HOUR AND DATE SPECIFIED MAY an offer already submitted, such change may be ma	on ea OWI Y REade by	cich copy of the offer so LEDGMENT TO BE SULT IN y telegram or letter,	ubmitted;				
12. ACCOUNTING AND APPROPRIATION DATE	ΓA (If required)								
		O MODIFICATIONS OF CONTRACTS/C CT/ORDER NO. AS DESCRIBED IN ITE							
A. THIS CHANGE ORDER IS ISSUED PURSU CONTRACT ORDER NO. IN ITEM 10A.					E IN THE				
B. THE ABOVE NUMBERED CONTRACT/O office, appropriation date, etc.) SET FORTH	IN ITEM 14, PURSUA	NT TO THE AUTHORITY OF FAR 43.10			anges in p	aying	,		
C. THIS SUPPLEMENTAL AGREEMENT IS	ENTERED INTO PORS	UANT TO AUTHORITT OF:							
D. OTHER (Specify type of modification and au	thority)								
E. IMPORTANT: Contractor is not,	is required to sign	n this document and return	coj	pies to the issuing	office.				
14. DESCRIPTION OF AMENDMENT/MODIFIC where feasible.)	ATION (Organized by	UCF section headings, including solicitatio	on/co	ontract subject ma	tter				
CONTINUED ON PAGES 2 THRU 11									
Except as provided herein, all terms and conditions of the docu	ment referenced in Item 9A o	r 10A, as heretofore changed, remains unchanged at	nd in	full force and effect					
15A. NAME AND TITLE OF SIGNER (Type or pr		16A. NAME AND TITLE OF CON			R (Type o	r prin	it)		
		TEL:		EMAIL:					
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERI	ICA			16C.	DATE	SIG	NED
	_	BY				15-	Aug-2	2003	
(Signature of person authorized to sign)	-	(Signature of Contracting Office	cer)			.0-7	.ug 2	.500	

EXCEPTION TO SF 30 APPROVED BY OIRM 11-84 STANDARD FORM 30 (Rev. 10-83) Prescribed by GSA

FAR (48 CFR) 53.243

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

SUMMARY OF CHANGES

SUBJECT: Solicitation No. DACW21-03-B-0002, Seismic Remediation - Clemson Diversion Dams, Hartwell Lake is amended as follows:

- a. Pre-Bid Conference Agenda including questions and answers is provided in Enclosure 1 of this amendment.
- b. The date and time for receipt of bids is hereby changed from 19 August 2003 at 2:00 p.m. to 26 August 2003 at 2:00 p.m.
- c. SECTION 00010 SOLICITATION CONTRACT FORM is amended as follows:

CLIN 0001

The CLIN description has changed from Mobilization to Mobilization and Demobilization.

CLIN 0005

The CLIN description has changed from Soil-Cement Mixing, Lower Diversion Dam to Principle Soil-Cement Mixing, Lower Diversion Dam. Section 02240 is changed to 02240R.

CLIN 0006

The CLIN description has changed from Soil-Cement Mixing, Upper Diversion to Principal Soil-Cement Mixing Upper Diversion. Section 02240 is changed to 02240R.

CLINS 0011, 0012, 0013, 0014, 0014AA and 0014AB are hereby added. See Revised Schedule provided as Enclosure 2.

d. SECTION 00700, CONTRACT CLAUSES, is amended to add the following clause:

52.211-18 VARIATION IN ESTIMATED QUANTITY (APR 1984)

If the quantity of a unit-priced item in this contract is an estimated quantity and the actual quantity of the unit-priced item varies more than 15 percent above or below the estimated quantity, an equitable adjustment in the contract price shall be made upon demand of either party. The equitable adjustment shall be based upon any increase or decrease in costs due solely to the variation above 115 percent or below 85 percent of the estimated quantity. If the quantity variation is such as to cause an increase in the time necessary for completion, the Contractor may request, in writing, an extension of time, to be received by the Contracting Officer within 10 days from the beginning of the delay, or within such further period as may be granted by the Contracting Officer before the date of final settlement of the contract. Upon the receipt of a written request for an extension, the Contracting Officer shall ascertain the facts and make an adjustment for extending the completion date as, in the judgement of the Contracting Officer, is justified.

Section

e. Section 00800, Special Contract Requirements, clause 52.232-5001 Continuing Contracts (MAR 1995)-EFARS, the amount of \$25,000,00 in paragraph (b) is changed to read \$10,000.00.

f. TECHNICAL SPECIFICATION CHANGES: The revised and Added sections listed below (Revised and Added by Amendment No. 0004) are hereby added to and made a part of the solicitation. Revised or added information is underlined and deleted information is struck out. Revisions can be located in the appropriate volume of specifications by searching for an asterisk and amendment number (i.e., *1). Deleted Sections are also listed.

Revised Sections	Added Sections	Deleted Sections
Table of Contents		
Wage Rates Revised		
Prebid Conference Minutes Added		
Project Table of Contents		
01330 (ENG Form 4288)		
01500		
02140		02240
	02240R	02241
	02241R	02250
	02250R	
02300		
Appendix C (Added Water Level Readings)		
	Appendix E	

g. CONTRACT DRAWINGS:

- (1) Sheets 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, and 24 with Revision 1 dated 29 July 2003 are hereby added to and made a part of the contract drawings.
 - (2) Sheet 15A dated 29 July 2003 is hereby added to and made a part of the contract drawings.

ENCLOSURE 1

PREBID CONFERENCE

A Prebid Conference was held in room 104 of McAdams Hall at Clemson University in Clemson, South Carolina, on June 10 and 11, 2003. Discussions with design engineers and site visits to both dams were conducted in the afternoon of June 10. Additional discussion and fielding of questions were held in the morning of June 11.

At the Prebid Conference, the USACE and GEI representatives presented a brief summary of the project background, which touched on the history of the dams, the reason for the project, and the adjacent university facilities. GEI then presented a brief description of the project including characteristics of the existing dams, berm excavation and replacement, soil cement shear and longitudinal walls, soil-cement strength requirements, subsurface conditions at the dams, seepage collection drains, and schedule. The USACE and GEI answered questions during and following the presentation. Attendees made site visits to both dams following the presentations. Access and protection of adjacent facilities were discussed at both the presentation and during the site visits.

A list of attendees at the Prebid Conference was included in Amendment No. 0001. The following bidder questions, with responses, were asked at the Prebid Conference, and submitted by email, fax and telephone subsequent to the conference:

1. Question: Are there any restrictions on what trees can and cannot be cut down on Loop Rd and at the entrance to the lower dam?

Response: Loop Road and the entrance shall be widened only as necessary to accommodate turning radii of construction equipment and satisfactory ingress and egress of construction traffic. Single-lane traffic pattern shall be maintained on Loop Road. Entrance to Lower Dam can be double lane. See revised Notes on Plate B-9.

2. Question: Are there any limitations on how wide we can make the Loop Rd during construction?

Response: See response to above question.

3. Question: Can we widen the opening in the chain link fence at the entrance to the lower dam?

Response: Yes. See revised Notes on Plate B-9.

4. Question: Can we pull power off of any power pole near the site or does it have to be on COE property?

Response: Contractor is to obtain power from Clemson University. See revised Section 01500, paragraph 1.3.1.

5. Question: Specification Section 02240 – 2.2.1: Strength Criterion, gives a formula that is to be used to calculate the required strength based upon the contractors proposed soil mixing layout. The question is in regards to how the average wall width (Wa) is computed by determining the average of the minimum and maximum wall widths. Because the wall is made up of overlapped circular soil mixed columns, the actual wall average is greater that the average of the minimum and maximum wall widths. The actual average wall width can easily be calculated by the contractor and verified by the Army Corps for any proposed layout. By using this more conservative approach to calculating the wall width, all of the contractors will have to use additional cement to achieve strengths approximately 8-10% greater that what is actually required, raising costs to the government. For example, 3-foot diameter soil mixed columns of 27 inch centers equates to a maximum wall width of 3 foot and minimum of 2 feet, for a Wa of 2.5. The actual average width of such a layout is actually 2.7 feet, or 8% wider.

Response: The formula has been revised, see revised Section 02240R, paragraph 2.2.1 and revised Section 02241R, paragraph 2.2.1.

6. Question: Specification Section -2240 – 3.6.4: Disposal of Mixing Spoils, requires excess mixing spoils to be disposed of offsite. Soil mixing typically generates 20-40 percent spoils, which is additional material that will have to be disposed of off-site. Based on the extensive quantity of soil mixing required on this project, could this requirement be changed and the spoils be left on-site. These spoils can be used to buttress the downstream dam slopes. This quantity of spoil will cost hundreds of thousands of dollars to dispose off-site, but would have minimal impact based upon the extensive surface area of the lower downstream face of the dam.

Response: Yes, provided mixing spoils can be satisfactorily mixed with common fill. See revised Plate B-12 and new Plate B-14A and revised Section 02240R, paragraph 3.6, revised Section 02241R, paragraph 3.6, and revised Section 02300, new paragraph 3.5.

7. Question: Specification Section 01500 – 1.11: Contractor's Field Laboratory states, "The Contractor shall provide at the project site a temporary facility in which he shall house and use the testing equipment necessary to perform all the tests required for the soil-cement mixing construction." Does this imply that unconfined compression strength (UCS) testing has to be performed in the field? This is not typical for soil-mixing construction projects. Typically samples are molded and stored in the field prior to delivery to a permanent laboratory facility for both storage and UCS testing.

Response: Specification 01500, Paragraph 1.11 has been revised to require a temporary facility to house equipment to prepare and store test samples. Contractor can install UCS testing equipment, at his option.

8. Question: Is a NPDES permit required?

Response: No. See revised Section 02140R, paragraph 3.2.3.

9. Question: Will Value Engineering proposals be accepted?

Response: The standard Value Engineering clause is in the contract, and the Contractor may submit value engineering change proposals (VECPs) in accordance with the clause after award of the contract.

10. Question: What about use of lake water after a rain:

Response: Use of lake water is up to the Contractor. Contractor should consider effects of rainfall on quality of water in locating intake line and the manner of withdrawal. See revised Section 02240R, paragraph 2.1.3.2 and revised Section 02241R, paragraph 2.1.3.2.

11. Question: Are there LDs (liquidated damages)?

Response: Yes. See Section 00800 SPECIAL CONTRACT REQUIREMENTS, clause 52.211-12.

12. Question: Can the independent lab just do testing, not sampling?

Response: Yes; however, the quality of the sampling and preparation of the samples can affect the testing results. See revised Section 02240R, paragraph 3.8.3 and Section 02241R, revised paragraph 3.8.3.

13. Question: Will 85% core recovery be required in sand and gravel?

Response: Yes.

14. Question: Cement or soil-cement ASTM standard regarding immersing?

Response: Samples will be prepared, cured and tested in accordance with both cement and soils-cement standards. See revised Section 02240R, paragraphs 3.8.3.2.e and f, and revised Section 02241R, paragraph 3.8.3.3.f.

15. Question: Can Contractor proceed at risk after test sections prior to obtaining 28-day strengths?

Response: Yes. See revised Section 02240R, new paragraph 1.1.6.

16. Question: We are concerned that low-boys cannot negotiate the access off of SC Highway 93 to the Lower Dam. Can something be done to address this possibility?

Response: During mob and demob for the Lower Dam low-boys (only) will be permitted to utilize the connector road between Perimeter Road and East Beach Road; see Legend on Plate B-1. To permit other types of trucks, such as cement tanker trucks, to better negotiate the access off of SC Highway 93, the Contractor will be permitted to regrade intersection and widen the gate. See new Note 14 on Plate B-9.

17. Question: Is hydrant at Lower Dam identified?

Response: Hydrant has been added to drawings. See Plates B-4 and B-9.

18. Question: What type of temporary safety fencing is required in Paragraph 1.8 of Section 01500?

Response: The safety fencing referred to in revised Section 01500, paragraph 1.8 shall be 4-foot high, orange, rectangular configuration, high density, UV stabilized polyethylene. See revised Paragraph 1.8. The security fencing in Paragraph 1.7.4 Security Provisions of revised Section 01500 shall be chain link fence in accordance with Section 02821A of the specifications.

19. Question: Can Contractor run a line to lake?

Response: Contractor can run a line to lake. Type, configuration and details of proposed intake must be submitted with request for temporary water withdrawal permit. See revised Section 01500, paragraph 1.17.

20. Question: Is there a maximum diameter of auger specified?

Response: No.

21. Question: Is 28-day wait for strength test results from test sections included in 270 days?

Response: Yes.

22. Question: Can drains be installed from existing ground surface prior to soil-mix construction?

Response: Yes, but the Contractor shall exercise strong quality control of the drain installation. See new Plate B-14A for alternate drain detail.

23. Question: Will Contractor be paid for more than 4' embedment?

Response: No. The 4-foot embedment shall be based on the lowest full-diameter flight, or cutting blade on the shallowest, or shortest auger. The Contracting Officer shall determine the elevation of the top of the sand and gravel stratum. See revised Section 02240R, paragraph 3.3.f. and revised Section 02241R, paragraph 3.3.g.

24. Question: If wet grab sample strength is not sufficient, can coring be used?

Response: Yes, that is the intent. See see revised Section 02240R, paragraph 3.8.3.3.

25. Question: What is normal pool in winter?

Response: Elevation 656.

26. Question: Section 01500 TEMPORARY CONSTRUCTION FACILITIES Paragraph 1.13 Construction Schedule Restraints.

Will cement deliveries be allowed the day preceding a football game or rowing meet?

Response: Cement deliveries will be allowed on the day preceding a rowing meet, but not on the day preceding a football game.

27. Question: Section 01500 TEMPORARY CONSTRUCTION FACILITES Paragraph 1.17 Temporary Water Withdrawal Permit.

Are there any fees for this permit?

Response: No.

28. Question: Section 02000 SITEWORK Part 3.10 Paragraph 3.10.3.5 Field Density Tests Paragraph 3.10.5.1. The minimum test frequencies specified will result in a very large number of tests. Will it be acceptable to substitute nuclear testing for the sand displacement ASTM D 1556 tests specified?

Response: No; the test frequencies specified should not result in a very large number of tests.

- 29. Question: Section 02240, 3.8.3.2. Wet Grab Soil-Cement samples, Item d. The specifications require the preparation of four the soil-cement cylinders with 6 inch diameter by 12=inch height. Based on our experience on hundreds of soil mixing projects, we believe soil-cement cylinder with 3-inch diameter by 6-inch height would serve the equivalent function. We, therefore request he consideration of using 3" x 6" samples based on the discussions below:
- 1. Soil-cement has significantly lower strength than concrete. The weight of 6" x 12: soil-cement would impose a lot of stresses or impacts on the soil-cement samples during the handling and testing process, which, in turn, could generate micro cracks invisible to the eyes by significant enough to affect the results of strength testing and generate misleading test results.
- 2. Due to the large quantity of soil-cement needed for the preparation of 6" x 12" soil-cement cylinder, the cost of sample retrieval, handling, testing, and storage would be very high.
- 3. Four strength test will be performed on four 6" x 12" soil-cement cylinders. Considering the sensitivity of 6" x 12" soil-cement samples, at least two spare samples would be needed, which will further increase project cost.
- 4. By using 3"x 6" soil-cement samples, the cost will be significantly reduced. Six 3" x 6" cylinders could be prepared to provide two spare samples for additional confirmation test when needed.
- 5. To consider the effects of soil lumps, the entire wet sample could be passed through $\frac{1}{2}$ inch sieve, and any particles retained on the sieve could be cut to a size and then be returned to the sample from which the six 3" x 6" cylinders can be formed immediately.

Response: The Government has discussed and considered the request; however, the specified size of the cylinders remains 6"x12".

30. Question: Note 6, Plate B-8. Restricting the area of operation for soil-cement installation, embankment excavation and backfill, and installation of drainage pipe will result in a very congested work area. Is it possible to consider extending the length of the work area?

Response: Lengths of the work area in certain reaches have been increased. See revised Note 6, Plate B-8 and revised Note 18, Plate B-10.

31. Question: Would the Government permit the excavation of a trench upstream of the drain for the entire length of each dam to an elevation of about 635 prior to any other excavation for the purpose of installing a well-point system and header?

Response: Yes. Contractor to determine and provide safe excavation slopes meeting OSHA requirements.

32. Question: Section 52.214-4002 HAND-CARRIED OR MAILED BIDS/PROPOSALS requires that a bid be labeled with your Notice to Bidder OF-17 label. Since the documents are only available electronically, there is no label. Please advise.

Response: The OF-17 label is no longer necessary. However, you are required to have information such as Invitation No., Date of Bid/Proposal Opening, and Bid/Proposals for (Title of Project) on the outermost wrapper.

33. Question: We ask that the Government consider clarifying the Contactor qualification requirement to include the experience of their personnel, so that other competent specialty foundations firms with experienced multi-shaft soil mixing personnel are considered.

Response: Contractor's personnel are considered an entity of their organization. Therefore, the experience of the contractor's personnel would be an integrated part of the contractor's qualifications.

ENCLOSURE 2

Section 00010 – Solicitation Contract Form

REVISED SCHEDULE SEISMIC REMEDIATION – CLEMSON DIVERSION DAMS HARTWELL LAKE, CLEMSON, SOUTH CAROLINA

ALL BIDDERS ARE ADVISED MATERIALLY UNBALANCED BIDS MAY BE REJECTED AS NONRESPONSIVE. SEE SECTION 00100 – 52.214-0019

ESTIMATED LINE ITEMS SHALL NOT EXCEED THE ESTIMATED AMOUNT WITHOUT PRIOR APPROVAL OF THE CONTRACTING OFFICER.

ITEM NO 0001	SUPPLIES/SERVICES Mobilization & Demobilization	QUANTITY 1	UNIT Lump Sum	UNIT PRICE \$	\$ AMOUNT
ITEM NO 0002	SUPPLIES/SERVICES Sitework (Section 02000)	QUANTITY 1	UNIT Lump Sum	UNIT PRICE \$	\$ AMOUNT
ITEM NO 0003	SUPPLIES/SERVICES Dewatering, Lower Diversion Dam (Section 02140R)	QUANTITY 1	UNIT Lump Sum	UNIT PRICE \$	\$ AMOUNT
ITEM NO 0004	SUPPLIES/SERVICES Dewatering, Upper Diversion Dam (Section 02140R)	QUANTITY 1	UNIT Lump Sum	UNIT PRICE \$	\$ AMOUNT
ITEM NO	SUPPLIES/SERVICES	ESTIMATED QUANTITY	UNIT	UNIT PRICE	AMOUNT
0005	Principle Soil-Cement Mixing, Lower Diversion Dam (Section 02240R)	100,500	Cubic Yard	\$	\$
ITEM NO	SUPPLIES/SERVICES	ESTIMATED QUANTITY	UNIT	UNIT PRICE	AMOUNT
0006	Principle Soil-Cement Mixing , Upper Diversion (Section 02240R)	101,500	Cubic Yard	\$	\$

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0007	Drains, Lower Diversion Dam (Section 02250R)	1	Lump Sum	\$	\$
ITEM NO 0008	SUPPLIES/SERVICES Drains, Upper Diversion Dam (Section 02250R)	QUANTITY 1	UNIT Lump Sum	UNIT PRICE \$	AMOUNT \$
ITEM NO	SUPPLIES/SERVICES	ESTIMATED QUANTITY	UNIT	UNIT PRICE	AMOUNT
0009	Inclinometer Casing (Section 02235)	280	Linear Foot	\$	\$
ITEM NO 0010	SUPPLIES/SERVICES Inclinometer Reading (Section 02235)	QUANTITY	UNIT	UNIT PRICE	AMOUNT
ITEM NO	SUPPLIES/SERVICES	ESTIMATED QUANTITY	UNIT	UNIT PRICE	AMOUNT
0010AA	First 70 Inclinometer Readings (Section 02235)	70	Each	\$	\$
ITEM NO	SUPPLIES/SERVICES	ESTIMATED QUANTITY	UNIT	UNIT PRICE	AMOUNT
0010AB	Over 70 Readings (Section 02235)	30	Each	\$	\$
ITEM NO	SUPPLIES/SERVICES	ESTIMATED QUANTITY	UNIT	UNIT PRICE	AMOUNT
0011	Additional Soil - Cement Mixing (Section 02240R)	8,000	Cubic Yard	\$	\$
ITEM NO	SUPPLIES/SERVICES	ESTIMATED QUANTITY	UNIT	UNIT PRICE	AMOUNT
0012	Additional Wet Grab Samples (Test Set of Three Samples Each) (Section 02240R and 02241R)	40	Each	\$	\$
ITEM NO	SUPPLIES/SERVICES	ESTIMATED QUANTITY	UNIT	UNIT PRICE	AMOUNT
0013	Additional Core Borings (Sections 02240R and 02241R)	850	Linear Foot	\$	\$

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ITEM NO 0014	SUPPLIES/SERVICES Interface Core Borings (Section 02240R and 02241R)	QUANTITY	UNIT	UNIT PRICE	AMOUNT
ITEM NO	SUPPLIES/SERVICES	ESTIMATED QUANTITY	UNIT	UNIT PRICE	AMOUNT
0014AA	Interface Core Borings First 450 Linear Feet (Section 00240R and 02241R)	450	Linear Foot	\$	\$
ITEM NO	SUPPLIES/SERVICES	ESTIMATED QUANTITY	UNIT	UNIT PRICE	AMOUNT
0014AB	Interface Core Borings Over 450 Linear Feet (Section 00240R and 02241R)	200	Linear Foot	\$	\$
TOT	AL BID ITEMS 0001 THI	ROUGH 0014AB			\$